

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Dharshini C. Fongalland et al. : Art Unit:
Application No.: To Be Assigned : Examiner:
Filed: Herewith :
FOR: SUBSTRATE BINDER :

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents
Washington, DC 20231

SIR:

Prior to examination, please amend the above-identified application as follows.

IN THE SPECIFICATION:

Please replace the paragraph beginning at page 5, line 14, with the following:

The substrate of the invention is suitable for use in the preparation of a composite membrane for use in a fuel cell. When for use in a fuel cell, the total thickness of the membrane is less than 200 μ m and preferably less than 100 μ m.

Please replace the paragraph beginning at page 6, line 18, with the following:

2. Perfluorinated or partially-fluorinated polymers further having aromatic rings, such as those described in PCT patent specifications numbers WO 95/08581 and WO 97/25369, which have been functionalised with SO₃H, PO₂H₂, PO₃H₂, CH₂PO₃H₂, COOH, OSO₃H, OPO₂H₂, and/or OPO₃H₂. Also included are radiation- or chemically-grafted perfluorinated polymers, in which the perfluorinated carbon chain is activated by radiation or chemical initiation in the presence of a monomer, such as styrene, which can be functionalised to contain an ion-exchange group. Suitable perfluorinated polymers